Hurricane Hazards

Winds

When most people think about the destructive power of a hurricane, they most likely think about the strong winds. With wind speeds ranging from 74 mph in a minimal hurricane, to greater than 155 mph in a Catastrophic storm, it should be no surprise that most buildings, especially mobile homes, are no match to a hurricane's winds.

Remember, mobile homes are extremely vulnerable to the high winds of a hurricane, and should be evacuated if expected to be within the strong wind region of the storm.

Storm Surge

The storm surge is abnormal rise in water due to the wind and pressure forces of a tropical system. In general, storm surges occur near and just to the right of where the center of the hurricane makes landfall. Potentially, the most disastrous surges result along coasts with low-lying terrain, which allows the water to penetrate well inland, or across inland bodies of water such as bays, lakes and rivers. Typically, the rising water associated with the surge affects an area of about 50 to 100 miles, and lasts for several hours.

History has proven that the storm surge poses the greatest threat to life and property for coastal residents, with the most hurricane related deaths being caused by drowning.

Heavy Rains/Inland Flooding

It is not uncommon for heavy rainfall amounts of 5 to 10 inches to occur with the passage of a hurricane, which can result in widespread destructive flooding. In fact, even relatively weak tropical storms can produce excessive amounts of rain, especially if they interact with frontal boundaries and/or mountainous terrain.

In the past 30 years, inland flooding due to tropical cyclones has been responsible for more than half of the deaths. Deaths caused by inland fresh water flooding have now become greater than coastal flooding, most likely because residents that live along or near coastal locations are usually evacuated during a tropical cyclone event.

Tornadoes

This is probably the least well known hazards of tropical systems. Tornadoes typically form in the right-front quadrant of either a landfalling tropical storm, or hurricane. These tornadoes usually develop in the outer rainbands of the tropical system, and typically less weak than the classic mid-western type tornadoes.